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BRIARCLIFF MANOR, NY 10510

EXAMINER

LAMB, CHRISTOPHER RAY

ART UNIT

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2627

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12/11/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/528,620

Applicant(s)

BLACQUIERE ET AL.

Examiner

Christopher R. Lamb

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2008.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-13 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1, 3-10 and 12 is/are rejected.
7) ☒ Claim(s) 11 and 13 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: there is no antecedent basis for the terminology "computer-readable medium," as per claim 10.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ono et al. (US 6,002,655) in view of Takahashi (US 5,878,020).

Regarding claim 1:

Ono discloses:

An optical disc comprising at least two writable layers (column 2, lines 20-25).

Ono does not disclose:

"at least two defect management areas, a first one of the at least two defect management areas being positioned on a first one of the at least two writable layers at a first radial position, a second one of the at least two defect management areas being positioned on a second one of the at least two writable layers at a second radial position being different than the first radial position;

wherein at the radial position of the first one of the at least two defect management areas, no other defect management areas are positioned.”

Takahashi discloses:

at least two defect management areas (shown in Fig. 5: there is one at the beginning of every zone).

It would have been obvious to one of ordinary skill in the art to include in Ono a defect management area at the beginning of beginning of every zone, as taught by Takahashi.

The rationale is as follows:

Takahashi discloses the benefit of zone CLV control in column 1, lines 25-40: it allows the best of CAV and CLV control.

Takahashi discloses this defect management method improves the speed of file management in zone CLV control (column 1, lines 60-65).

Ono in view of Takahashi discloses:

at least two defect management areas (as taught by Takahashi, there is one at the beginning of every zone),

a first one of the at least two defect management areas being positioned on a first one of the at least two writable layers at a first radial position (as taught by Takahashi),

a second one of the at least two defect management areas being positioned on a second one of the at least two writable layers at a second radial position being different than the first radial position (since there are recordable zones on the second layer of

Ono, it is obvious to also include defect management areas at the beginning of each zone on those layers; Ono discloses the discs are recording in opposite track paths in column 4, lines 50-65: therefore the beginning of a zone on the first layer is not in the same place as the beginning of a zone on the second layer);

wherein at the radial position of the first one of the at least two defect management areas no other defect management areas are positioned (the management areas are at the beginning of each zone; the two layers are recorded in opposite directions; therefore the beginning of each zone is in different places on the two layers).

Regarding claim 3:

Ono in view of Takahashi discloses:

wherein the at least two defect management areas are evenly spread over a radial position on the disc (any two of the defect management areas are "evenly spread" over a radial position: for example, take the first area on the first layer and the first area on the second layer. Since the layers are recorded in opposite directions, they are at opposite ends of the disc, and therefore evenly spread over it).

Regarding claim 4:

Ono in view of Takahashi discloses:

wherein one defect management area is located on each one of the at least two writable layers (there are multiple ones on each layer, so there is at least one).

Regarding claim 5:

Ono in view of Takahashi discloses:

wherein the first radial position is an inner side of the disc, and the second radial position is an outer side of the disc (the first is the inner side of the first zone of the first layer; the second the inner side of the first zone on the second layer, as discussed above, but since the second layer is recorded in the opposite direction, this is the outer side of the disc).

Regarding claim 6:

Ono in view of Takahashi discloses:

wherein the first radial position is an inner side of the disc (the first area is at the beginning of the first zone, so it is on an inner side, as seen in Takahashi Fig. 5), and

wherein a third one of the at least two defect management areas is present on the first one of the layers at a radial position corresponding to an outer side of the disc (since the second layer is recorded from the outside in, the area at the beginning of the zone on the second layer is on the outer side of the disc), and

wherein the second radial position is in-between the first radial position and the third radial position (there are multiple management areas, as shown in Takahashi Fig. 5, so at least some fall between the two positions).

Regarding claim 7:

Ono in view of Takahashi discloses:

wherein a plurality of the at least two defect management areas is located on the first layer on a plurality of different evenly distributed first radial positions (as per Takahashi Fig. 5), and

wherein a plurality of the at least two defect management areas is located on the second layer on a plurality of different evenly distributed second radial positions (as per Fig. 5, but reversed as for Ono's opposite path recording),

the first and second radial positions being selected to obtain substantially equal radial distances between defect management areas being successive in the radial direction (as can be seen in Takahashi Fig. 5, the areas are equally spaced: therefore there are equal radial distances between the successive areas on each layer).

Regarding claim 8:

Ono in view of Takahashi discloses:

An apparatus for accessing an optical disc (Ono Fig. 1) comprising at least two writable layers and at least two defect management areas being positioned on different ones of the at least two writable layers on different radial positions, wherein at the radial position of the first one of the at least two defect management areas, no other defect management areas are positioned (taught by Takahashi as discussed above), the apparatus comprising

an optical element for generating a light beam directed towards the optical disc and for receiving a reflected light beam being reflected by the optical disc while rotating (Ono Fig. 1: the optical pickup 2),

a focusing circuit for focusing the light beam on one of the at least two writable layers (Ono Fig. 1: the focus actuator 3, plus the drive circuit, etc.);

a position circuit for radially positioning the light beam with respect to the optical disc (Ono Fig. 1: the slide motor motion signal generation circuit 29);

a motor for rotating the optical disc with respect to the optical element (not explicitly shown, but inherent: the rotatory encoder 26 monitors the rotating speed so it must have a motor for rotating the disc) ; and

a signal processing circuit for writing or reading data to or from the optical disc (since it can reproduce the disc – e.g., Ono abstract – it must have a signal processing circuit allowing it do so).

Regarding claim 9:

Ono in view of Takahashi discloses:

A method of positioning defect management areas on an optical disc comprising at least two writable layers, the method comprises positioning at least two defect management areas on different ones of the at least two writable layers on different radial positions, wherein at the radial position of the first one of the at least two defect management areas, no other defect management areas are positioned (taught by Takahashi as discussed above).

Regarding claim 10:

Ono in view of Takahashi discloses:

A compute=readable medium having recorded thereon a computer program for recording information, which computer program is being operative to cause a processor to perform the method as claimed in claim 9 (the apparatus of Ono Fig. 1 is controlled by a controller, so it must have a processor with a computer program product to implement the method discussed as per claim 9).

Regarding claim 12:

Ono in view of Takahashi discloses:

wherein said method further comprises the steps of:

controlling a write or read process from or to the optical disc by supplying a positioning signal for controlling the positioning to move a light beam from an actual radial position at which an error area is present to a nearest one of the at least two defect areas (Takahashi column 14, lines 55-65); and

controlling a focusing of the light beam on one of the at least two writable layers to focus on the one of the two writable layers at which the one of the at least two defect areas is present to which the light beam is moved (it must focus on the layer to write and/or read from it).

Allowable Subject Matter

4. Claims 11 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
5. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 11:

The closest prior art of record, Ono in view of Takahashi, does not disclose wherein the controller controls the positioning circuit to move the light beam from an error area in one of the data areas to a nearest one of the defect management areas, said nearest one of the defect management areas being located on another layer of the

optical disc. This limitation in combination with the other limitations of the claim renders it allowable over the prior art of record.

Regarding claim 13:

It contains language similar to claim 11.

Response to Arguments

6. Applicant's arguments filed September 18th, 2008 have been fully considered.

With regards to claim 8:

Applicant's amendment has overcome the previous objection.

With regards to claim 10:

Applicant's amendment has overcome the 35 U.S.C. 101 rejection. However, the specification does not provide antecedent basis for the terminology used in the claim: "a computer-readable medium," and has been objected to as noted above. The specification should be amended to clarify what element is considered to be the computer-readable medium.

With regards to the 102(e) rejection of claims 1, 3-5, and 8-10 as anticipated by Ogawa:

Applicant's amendment has overcome this rejection.

With regards to the 103 rejection of the claims in view of Ono in view of Takahashi:

Applicant's arguments have been fully considered but are not persuasive.

First, applicant argues that Takahashi "neither discloses nor suggests applying the DMA's of Takahashi on both layers of Ono et al."

Applicant's basis for this argument appears to be that Takahashi alone only discloses DMA's on one layer. However, in Takahashi alone, only one layer is writable, and the defect management areas are therefore only on the writable layer. In the base reference, Ono, both layers are writable, and since Takahashi teaches putting defect management areas on the writable layer, it's obvious in the combination to have them on both.

Second, applicant argues that "it is not at all evident that DMA's would be present at different radial positions."

This follows directly from the combined teaching of Ono and Takahashi. Takahashi teaches putting the defect management areas at the beginning of every zone on the disc. Ono teaches that the second layer should be recorded in the opposite direction to the first layer. Therefore the beginning of each zone on the first layer will be in a different place than the beginning of each zone on the second layer, and when the defect management areas are put at the beginning of each zone, they will be present at different radial positions.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a

reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Regarding claim 11:

Applicant's argument is persuasive, and this claim has been objected to but otherwise indicated as allowable. Similarly for claim 13.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Lamb whose telephone number is (571) 272-5264. The examiner can normally be reached on 9:00 AM to 5:30 PM Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph H. Feild/
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CRL 12/3/08